

STATE OF ILLINOIS  
ENVIRONMENTAL PROTECTION AGENCY

INTER-OFFICE CORRESPONDENCE

DATE: October 28, 1975

MEMO TO: Division of Water Pollution Control - Field Operations Section

RECEIVED  
Field Operations Section ✓

FROM: G. T. Bachman, EPE, DWPC/FOS, Region III-C *GTB*

JAN 22 1976

SUBJECT: DOUGLAS COUNTY (Tuscola) - Cabot Corporation  
Reconnaissance Visit

Environmental Protection Agency  
State of Illinois

On the above date, the writer conducted a followup visit at Cabot to determine the status of their actions in response to our October 14, 1975, letter. A memorandum dated August 20 - September 26, 1975, describes the events leading to the letter.

Station C-2 on an unnamed tributary of the Scattering Fork at Route 45 was first sampled and appeared physically to be improved over the last visit of September 25. Laboratory results revealed a pH of 8.2, 13 mg/l suspended solids, 748 mg/l chlorides, and 2203 mg/l ROE (still somewhat high).

Mr. Fred Ross, Quality Assurance and Lab Supervisor, was then contacted at the plant. He informed me that a check for the value of the fish killed had been sent to the Game and Fish Fund and that a response to our letter was being prepared by Plant Manager Mike Fowler. He also noted that the pump which failed in the "Gallager pump pit" on September 16 had been rebuilt. It was his opinion that the subsurface drainage in the area where the deep well had backflowed was slowly improving in quality.

We then proceeded to the property line box where all drainage from Cabot's grounds combines with other field tile drainage before entering Drainage District No. 4. An extremely muddy appearance was observed at this location as well as a light oil film. Further investigation revealed that "driller's mud" from the area where the second deep well was being drilled had found its way to a catch basin tributary to this point. The need for proper handling of this material in a settling pond was discussed and Mr. Ross indicated they would have the contractor improve this phase of the construction. Settling areas had been provided but were not being adequately monitored and maintained. A grab sample was collected and revealed a pH of 7.5, suspended solids of 150 mg/l, and 1380 mg/l chlorides.

The oil was traced back to a small ditch in the area where the deep well and the oil in its annulus had backflowed. Mr. Ross indicated he would construct a small dam here and then dredge out the 20-30 ft. length which contained the oil soaked limestone and soil which appeared to be slowly leaching out.

---

EVERY INTER-OFFICE LETTER SHOULD HAVE ONLY ONE SUBJECT.  
ALL LETTERS TO BE SIGNED . . . NO SALUTATION OR COMPLIMENTARY CLOSING NECESSARY.

---



Both the oil and the "driller's mud" did not appear to pose any major problems and were not continuously reaching the property line box. In fact, approximately thirty minutes after collecting the aforementioned sample when we returned to the property line box, the flow had cleared up. It was further recommended that this box be cleaned out in order to allow better assessment of their current discharge. Considerable sediment had accumulated there since the deep well reversal episode and was misleading when observed.

This discharge together with those observed on September 16 and 25 continues to indicate the need for tighter controls by Cabot on their overall operations, i.e., education of employees and contractors, adequate backup and/or alarm systems, etc.

During the visit, it was also noted that the three storage areas utilized to retain what was possible during the deep well failure still contained the majority of their contents and that little progress had been made in re-injecting this material. It appeared it could take some time for them to catch back up.

Under the date of October 30, 1975, Cabot replied to our letter indicating the second well, which will provide backup protection during well inspections or in the event of downhole problems, should be operable by January 1, 1976. The letter also indicated that key pumps whose failure could allow discharges to occur were being repositioned to prevent flooding out during heavy precipitation; and that a conductivity alarm system would be installed at the property line box so that any deterioration of the flow leaving their property can be immediately detected and corrective action taken.

A followup visit will be scheduled after the first of the year to determine the status of the items covered in that letter.

GTB:bh  
1/6/76

cc: - K. L. Baumann, Region III-C